

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P588926

Luminaire Tested: **FMR-24-2-LD4-1STD-40-UNV-81-85-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588926
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-1)
Test Lab: INNOVATION CENTER
Issue Date: 12/8/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FMR-24-2-LD4-1STD-40-UNV-81-85-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

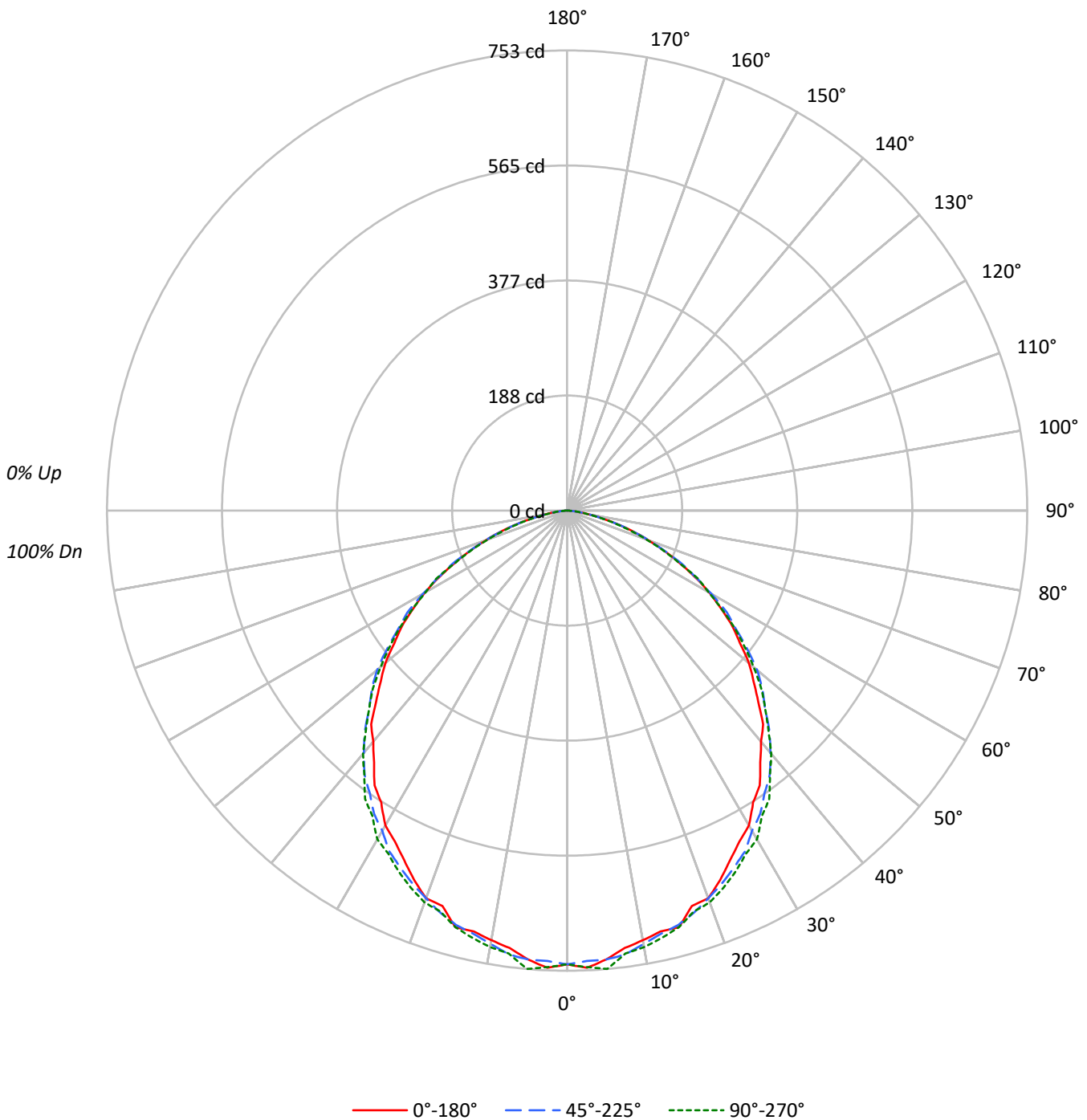
Lumens per Lamp: N/A
Luminaire Lumens: 1871.0 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41
7	67	53	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38	36
8	62	49	41	35	61	48	40	35	47	40	34	46	39	34	44	39	34	32
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	29	53	41	33	28	40	33	28	39	33	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1998	1998	1998
5°	1991	1992	2034
10°	1951	1968	1982
15°	1966	1955	1966
20°	1933	1933	1954
25°	1874	1915	1936
30°	1848	1880	1930
35°	1804	1851	1893
40°	1734	1818	1826
45°	1682	1741	1744
50°	1626	1700	1667
55°	1550	1580	1568
60°	1449	1463	1437
65°	1292	1325	1283
70°	1109	1113	1082
75°	878	876	842
80°	589	572	550
85°	321	318	296



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.8	3.7
10°-20°	197.9	10.6
20°-30°	296.5	15.8
30°-40°	351.4	18.8
40°-50°	352.1	18.8
50°-60°	298.8	16.0
60°-70°	201.5	10.8
70°-80°	88.5	4.7
80°-90°	14.4	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	564.3	30.2
0°-40°	915.7	48.9
0°-60°	1566.6	83.7
0°-90°	1871.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1871.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	742	742	742	742	742	
5°	737	735	737	735	753	69
15°	706	698	702	706	706	197
25°	631	634	645	653	652	292
35°	549	551	564	577	576	341
45°	442	450	458	469	458	342
55°	330	328	337	334	334	294
65°	203	200	208	200	202	202
75°	84	83	84	78	81	90
85°	10	10	10	10	10	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	742.4	742.4	742.4	742.4	742.4
2.5°	748.8	743.1	737.9	744.0	747.7
5°	737.1	735.4	737.4	735.2	752.9
7.5°	721.9	728.6	732.4	730.0	731.1
10°	713.9	711.6	720.1	726.1	725.2
12.5°	705.3	708.7	709.2	715.6	716.2
15°	705.8	697.6	701.9	705.6	705.8
17.5°	678.3	687.2	690.1	698.5	688.1
20°	675.0	668.6	675.0	683.5	682.2
22.5°	654.4	647.2	661.0	668.6	668.1
25°	631.0	634.4	644.8	653.2	651.9
27.5°	610.5	614.5	629.3	640.9	633.4
30°	594.7	592.6	605.1	615.5	621.2
32.5°	566.4	573.7	588.2	598.5	593.0
35°	549.2	550.9	563.6	576.6	576.3
37.5°	519.2	526.8	544.7	548.4	545.0
40°	493.6	501.2	517.4	521.3	519.7
42.5°	474.7	476.1	490.0	494.5	487.3
45°	441.9	450.1	457.6	469.4	458.3
47.5°	413.9	417.7	433.8	437.0	431.1
50°	388.5	389.8	406.0	402.1	398.3
52.5°	356.6	362.2	371.3	370.6	366.1
55°	330.3	328.1	336.7	334.4	334.3
57.5°	298.8	302.6	309.7	306.1	300.2
60°	269.2	269.3	271.9	267.8	267.0
62.5°	236.4	237.5	238.1	233.0	241.3
65°	202.9	200.2	208.1	200.1	201.5
67.5°	172.1	173.5	172.7	167.7	169.7
70°	140.9	142.6	141.4	135.7	137.5
72.5°	112.3	110.2	111.6	104.5	107.7
75°	84.4	82.7	84.3	78.3	81.0
77.5°	57.5	58.9	57.9	54.7	56.6
80°	38.0	36.9	36.9	35.1	35.5
82.5°	22.1	21.1	20.8	20.2	21.1
85°	10.4	10.1	10.3	10.0	9.6
87.5°	3.7	3.8	3.8	3.6	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)